

## AMENDMENTS

Please amend the application as indicated hereafter.

### *In the Drawings*

Please replace drawings sheet 2 (showing FIG. 2) and drawing sheet 5 (showing FIG. 5) with the newly-submitted, corresponding figures attached herewith on separate sheets. The following are the changes and/or corrections made to the drawings:

In FIG. 2: Figure 2 has been designated by a legend indicating that the figure represents "prior art."

In FIG. 5: a typographical error has been corrected changing the word "note" to "node" in block 336.

## **REMARKS**

This is a full and timely response to the non-final Office Action mailed December 5, 2003. Applicants have amended claims 6 and 16. Upon entry of the amendments in this response, claims 1 - 23 are pending. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### **I. Response to Objection to the Drawings**

The Office Action alleges that FIG. 2 "should be designated by a legend such as -- Prior Art - - because only that which is old is illustrated." In response to this objection, the drawings have been amended to designate FIG. 1 as "prior art." Applicants request that the objection to the drawings be withdrawn. It is believed that the amendments add no new matter to the present application.

While not specifically objected to, Applicants have amended FIG. 5 to correct a typographical error. It is believed that the amendment adds no new matter to the present application.

### **II. Allowable Subject Matter**

Applicants greatly appreciate the Examiner's statement in the previous Office Action that claims 21 - 23 are allowable.

### **III. Claims 6 and 16 Comply with 35 U.S.C. §112, Second Paragraph**

The Office Action rejects claims 6 and 16 under 35 U.S.C. §112, second paragraph, as allegedly indefinite for failing to particularly point out and distinctly claim

the subject matter which the Applicants regard as the invention. Specifically, the Office Action alleges that claims 6 and 16 recite the limitation "said feedback symbol" in lines 1 – 2 and that there is insufficient antecedent basis for this limitation in the claim.

Applicants have amended claims 6 and 16 to correct the antecedent basis of the above-described limitations. Accordingly, the rejection issued to claims 6 and 16 under 35 USC §112, second paragraph, has been overcome.

Applicants wish to clarify that the amendments to claims 6 and 16 are not made in response to any substantive rejection made by the Examiner during prosecution of the instant case based upon cited art of record. Furthermore, the amendments to claims 6 and 16 do not narrow the scope of claims 6 and 16 in any manner.

#### **IV. Claims 1 – 3, 5, 8 – 13, 15, and 18 - 20 are Patentable Over Tobagi, *et al.***

The Office Action rejects claims 1 – 3, 5, 8 – 13, 15, and 18 - 20 under 35 U.S.C. §102(b) as being allegedly anticipated by "Packet Switching in Radio Channels: Part II – The Hidden Terminal Problem in Carrier Sense Multiple Access and the Busy Tone Solution, IEEE, 1975," by Tobagi, *et al.* ("Tobagi"). For the reasons set forth below, the rejections should be withdrawn and the claims allowed.

##### ***Independent Claims 1 and 11***

Independent claims 1 and 11 recite:

1. A wireless transceiver for providing high speed wireless media access, comprising:  
*a local transceiver which is capable of transmitting data, via a transmit path while receiving a feedback signal via a receive path;*

a feedback generator connected to said local transceiver for generating and transmitting a feedback signal in response to said wireless transceiver receiving data; and

a feedback detector connected to said local transceiver for detecting feedback signals.

11. A wireless transceiver for providing high speed wireless media access, comprising:

***a means for transmitting data via a transmit path, while receiving a feedback signal via a receive path;***

a means for generating and transmitting a feedback signal in response to receiving data, connected to said means for transmitting data; and

a means for detecting feedback signals, connected to said means for transmitting data.

(*Emphasis Added*). The Applicants respectfully submit that claims 1 and 11 patently define over Tobagi for at least the reason that Tobagi fails to disclose or otherwise teach the features emphasized in bold text above.

The wireless transceiver of claim 1 requires “a local transceiver which is capable of **transmitting data via a transmit path while receiving a feedback signal via a receive path.**” Similarly, the wireless transceiver of claim 11 requires “a means for **transmitting data via a transmit path, while receiving a feedback signal via a receive path.**” Unlike the wireless transceiver of claims 1 and 11, the busy-tone multiple-access (BTMA) system of Tobagi discloses, at most, “whenever a terminal has a packet ready for transmission, it senses the busy-tone channel for  $t_d$  seconds (the detection time) at the end of which it decides whether the busy-tone signal is absent (in which case it transmits the packet); otherwise it reschedules the packet for transmission at some later time incurring a random rescheduling delay.” (Page 1424, right column). Further, Tobagi discloses that “in the event of a conflict, which the terminal learns about by failing to

receive an acknowledgement from the station, the terminal again reschedules the transmission of the packet for some later time, and repeats the above process.” (Page 1424, right column). The Office Action concludes that “it is inherent from this statement that there exists a ‘transceiver capable of transmitting data, via a transmit path while receiving feedback signal via a receive path.’” (Office Action, page 3). However, Applicants submit that it is not inherent from the Tobagi reference that there exists a transceiver or a means for transmitting data “while receiving a feedback signal via a receive path.” Rather, Tobagi teaches that a “terminal senses the busy-tone channel for  $t_d$  seconds **before** deciding to transmit.” (*Emphasis Added*, page 1427, left column). Thus, Tobagi does not disclose, teach, or suggest the limitation of “a local transceiver which is capable of transmitting data, via a transmit path **while** receiving a feedback signal via a receive path” as in claim 1, or “a means for transmitting data via a transmit path, **while** receiving a feedback signal via a receive path” as in claim 11.

Accordingly, and for at least these reasons, the Applicants respectfully submit that independent claims 1 and 11 patently define over Tobagi and, therefore, should be allowed. Furthermore, because independent claims 1 and 11 are allowable over the prior art of record, dependent claims 2 – 10 and 12 – 20 (which, respectively, depend from independent claims 1 and 11) are allowable as a matter of law for at least the reason they contain all the features and elements of their corresponding independent claim.

#### ***Dependent Claims 2 and 12***

Applicants submit that the rejection to dependent claims 2 and 12 is rendered moot in light of any of the arguments made above and, therefore, the claims are allowable

as a matter of law for at least the reasons that claims 2 and 12 contain all the features and elements of their corresponding independent claim. For at least this reason, Applicants request that the rejection of claims 2 and 12 be withdrawn.

Further, claims 2 and 12 are patentable over Tobagi for at least the independent and separate reason that Tobagi does not disclose, teach or suggest a wireless transceiver which **“ceases transmission of data upon detection of said feedback signal from a second wireless transceiver”** as in claim 1, or a wireless transceiver that **“ceases transmission of data upon detection of said feedback signal from a second means for transmitting data”** as in claim 12. Unlike the wireless transceiver of claims 2 and 12, the BTMA system of Tobagi discloses, at most, that **“in the event of a conflict, which the terminal learns about by failing to receive an acknowledgement from the station, the terminal again reschedules the transmission of the packet for some later time, and repeats the above process.”** (*Emphasis Added*, Page 1424, right column). Thus, Tobagi reschedules the transmission of the packet when **“failing to receive an acknowledgement from the station”** rather than ceasing transmission of data **“upon detection of said feedback signal from a second wireless transceiver”** as recited in dependent claims 2 and 12. Thus, Tobagi does not teach, suggest or disclose that the **“wireless transceiver ceases transmission of data upon detection of said feedback signal from a second wireless transceiver”** as in claim 2, or that the **“wireless transceiver ceases transmission of data upon detection of said feedback signal from a second means for transmitting data”** as in dependent claim 12. Accordingly, and for at least this additional reason, the Applicants respectfully submit that dependent claims 2 and 12 patently define over Tobagi and, therefore, should be allowed.

### ***Dependent Claims 9 and 19***

Applicants submit that the rejection to dependent claims 9 and 19 is rendered moot in light of any of the arguments made above and, therefore, the claims are allowable as a matter of law for at least the reasons that claims 9 and 19 contain all the features and elements of their corresponding independent claim. For at least this reason, Applicants request that the rejection of claims 9 and 19 be withdrawn.

Further, dependent claims 9 and 19 each include the limitation that the detection of the specific amount of energy **“results in said wireless transceiver ceasing transmission of data until said feedback signal is de-asserted.”** Unlike the wireless transceiver of claims 9 and 19, the busy-tone multiple-access (BTMA) system of Tobagi discloses, at most, “whenever a terminal has a packet ready for transmission, it senses the busy-tone channel for  $t_d$  seconds (the detection time) at the end of which it decides whether the busy-tone signal is absent (in which case it transmits the packet); otherwise it reschedules the packet for transmission at some later time incurring a random rescheduling delay.” (Page 1424, right column). Thus, unlike claims 9 and 19, which require that the specific amount of energy results in the wireless transceiver **“ceasing transmission of data,”** Tobagi checks for the busy-tone **before** sending the transmission of the packet. Rescheduling the transmission of the packet is not the equivalent of “ceasing transmission of data” as recited in claims 9 and 19. Thus, Tobagi does not teach, suggest or disclose a wireless transceiver “wherein detection of said specific amount of energy results in said wireless transceiver ceasing transmission of data until said feedback signal is de-asserted,” as recited in claims 9 and 19. Accordingly, and for

at least this additional reason, the Applicants respectfully submit that dependent claims 9 and 19 patently define over Tobagi and, therefore, should be allowed.

***Dependent Claims 3, 5, 8, 10, 13, 15, 18, and 20***

Applicants submit that the 35 USC §102 rejection to claims 3, 5, 8, 10, 13, 15, 18, and 20 is rendered moot in light of any of the arguments made above and, therefore, the claims are allowable as a matter of law for at least the reason that claims 3, 5, 8, 10, 13, 15, 18, and 20 contain all the features and elements of their corresponding independent claim. For at least this reason, Applicants request that the rejection of claims 3, 5, 8, 10, 13, 15, 18, and 20 be withdrawn.

**V. Claims 4, 7, 14, and 17 are Patentable over Tobagi**

The Office Action rejects claims 4, 7, 14, and 17 under 35 U.S.C. §103(a) as being allegedly unpatentable over Tobagi in light of the rejection to claim 1. Applicants disagree with the Office Action's allegation that it is well known in the art to provide the features recited in claims 4, 7, 14, and 17. However, Applicants submit that the 35 USC §103(a) rejection to claims 4, 7, 14, and 17 is rendered moot in light of any of the arguments made above and, therefore, the claims are allowable as a matter of law for at least the reason that claims 4, 7, 14, and 17 contain all the features and elements of their corresponding independent claim. For at least this reason, Applicants request that the rejection of claims 4, 7, 14, and 17 be withdrawn.



**VI. Prior Art Made of Record**

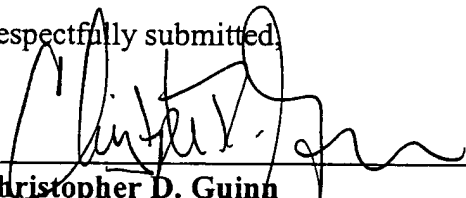
The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

**CONCLUSION**

The Applicants respectfully submit that all claims are now in condition for allowance, and request that the Examiner pass this case to issuance. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this response. If, however, any fee is deemed to be payable, you are hereby authorized to charge any such fee to Deposit Account No. 20-0778.

Respectfully submitted,

  
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